

## **A. Amendments to the Claims**

### Listing of the Claims

This listing of claims replaces all prior versions and listings of claims in the application:

1-3 (previously cancelled)

4. (currently amended) An optical encoding system comprising:

- a photo-emitter;

- a code strip comprising:

- a calibration area for generating a calibration signal, wherein said calibration area comprises a degree of transparency, wherein said transparency decreases as contaminants collect on said code strip;

- an indexing area for generating an indexing signal; and

- an encoding area for generating an encoding signal;

- a detector comprising:

- a calibration photodiode for converting a light from the calibration area into an electrical calibration signal, wherein said calibration signal is used to determine said degree of transparency of said calibration area;

- an indexing photodiode for converting light from said indexing area into an electrical indexing signal; and

- an encoding photodiode for converting light from said encoding area into an electrical encoding signal; and

- a circuit coupled with said detector and said photo-emitter, wherein if said degree of transparency of said calibration area is insufficient, said circuit increases a current to said photo-emitter to compensate for said

insufficient transparency of said ~~entire~~ code strip based on said calibration area ~~without requiring any~~ with no input signals being provided to said circuit from said encoding area or said indexing area.

5-7 (previously cancelled)

8. (previously presented) The optical encoding system of Claim 4, wherein said code strip is arranged such that light from the photo-emitter passes through transparent areas on said code strip.

9. (previously presented) The optical encoding system of Claim 4, wherein said detector is arranged to receive light which passes from said photo-emitter through transparent areas on said code strip.

10-13 (previously cancelled)

14. (previously presented) The optical encoding system of Claim 4, wherein said circuit modulates current to said photo-emitter in response to said calibration signal originating from said calibration photodiode on said detector.

15. (currently amended) An optical encoding method comprising:  
generating light from a light source;  
transmitting said light through a code strip, said code strip comprising a calibration area, an indexing area and an encoding area;  
receiving said light after it has been transmitted through said calibration area;  
converting said light transmitted through said calibration area into a calibration signal;  
using said calibration signal to determine whether or not a degree

of transparency of said calibration area is sufficient, wherein said degree of transparency is decreased as contaminants are deposited on said code strip; and

if said transparency of said calibration area is insufficient, increasing a current to said light source to compensate for said insufficient transparency of said ~~entire~~-code strip based on said calibration area without requiring any with no input signals being provided to said circuit from said encoding area or said indexing area.

16. (original) The optical encoding method of Claim 15, wherein the calibration signal is a function of a degree of transparency of the calibration area of the code strip.

17. (previously presented) The optical encoding method of Claim 15, wherein the brightness of said light is controlled by an electrical calibration signal.

18. (original) The optical encoding method of Claim 15, wherein the brightness of said light is a function of the degree of transparency of the calibration area of said code strip.

19. (previously presented) The optical encoding system of Claim 4 further comprising a wiper, wherein if said degree of transparency of said calibration area is insufficient, said wiper wipes said code strip to remove said contaminants deposited on said code strip.

20. (previously presented) The optical encoding method of Claim 15 further comprising operating a wiper to remove said contaminants from said code strip to increase said transparency of said code strip, if said transparency is insufficient.